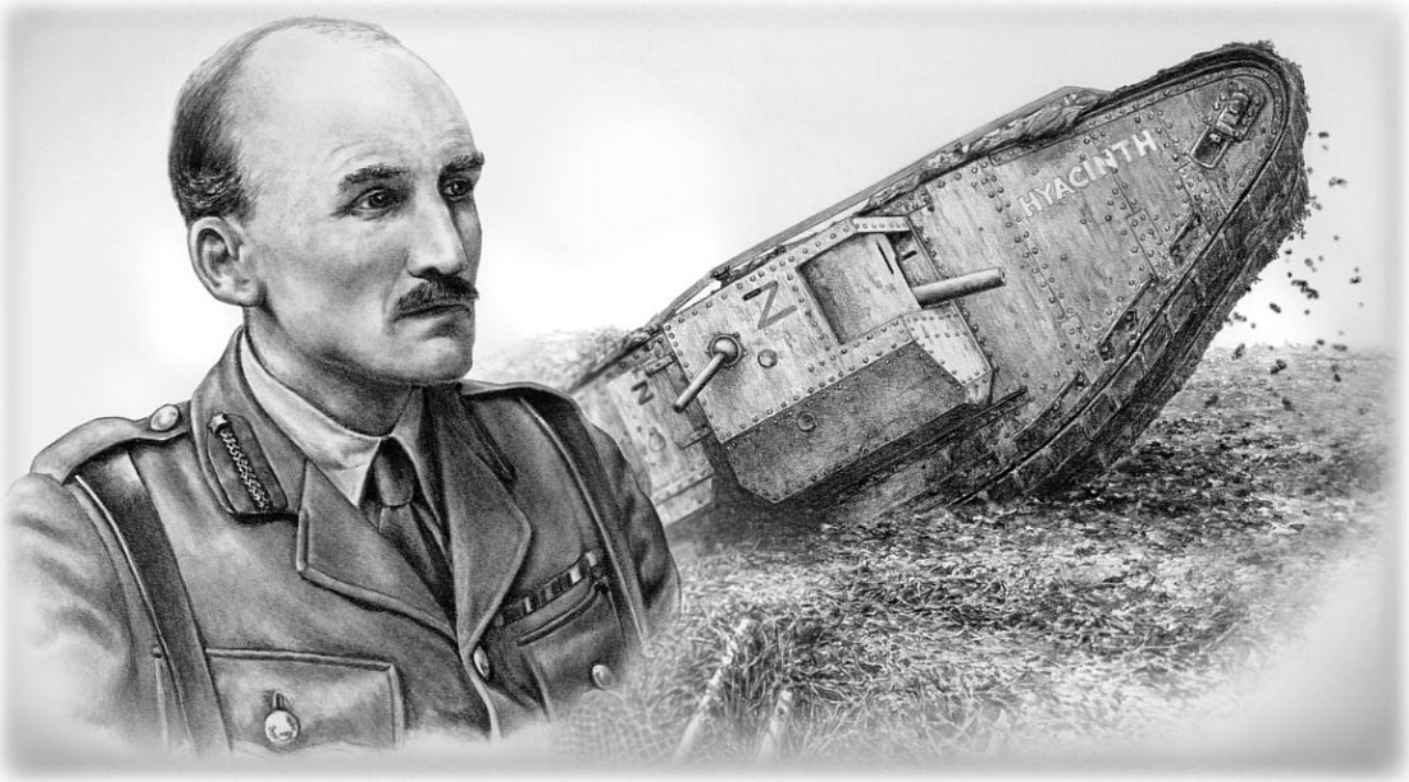


The Battle of Cambrai

by Captain Kristafer Ailslieger

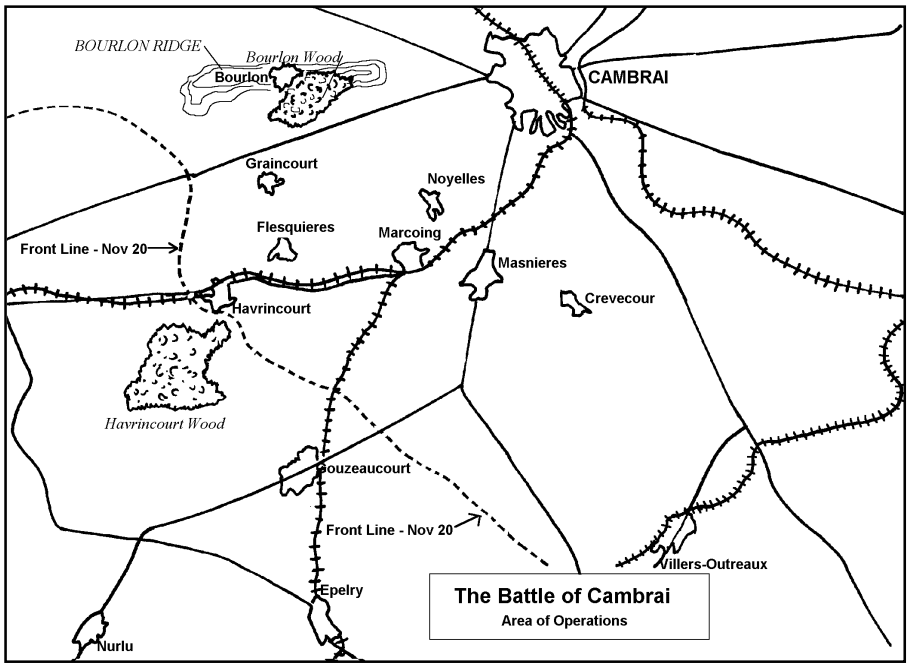
Just after dawn on the morning of 20 November 1917, without any preparatory bombardment, nearly 400 British tanks concentrated on a six-mile front, crossed the line into no-man's land, advancing towards the French town of Cambrai. This innovative attack, designed to break the stalemate that characterized the Western Front during the First World War, was the first attack by massed tank formations in history. It was the first time since their invention that tanks were employed as their developers originally envisioned, and it marked the birth of modern tank doctrine.

The attack was the inspiration of Lieutenant Colonel J.F.C. Fuller, the Chief of Staff of the British Tank Corps.[1] For the entire year since the tank's debut at the Somme in 1916, he and the Tank Corps commander, General Hugh Elles, had chafed at the piecemeal manner in which the tanks were being employed on the battlefield. Fuller and Ellis spent a great deal of time studying the tank's performance, noting the strengths and weaknesses, and developing methods for maximizing the former and minimizing the latter. However, they couldn't get the field commanders to follow their advice. Both men believed that mass and surprise were the key elements to achieving decisive results with the tank. They felt that if given the opportunity to deploy the tanks in massed formations as the primary attacking force, over relatively unbroken ground, with little or no preparatory bombardment, they could prove the validity of this doctrine. Then Fuller hit on the idea of staging a raid on Cambrai.

The idea was originally a small scale raid — a surprise attack over good ground to prove what the tanks could do when properly employed. However, as the higher commands became involved, the plan was transformed into a large scale offensive. By the time the attack began, it involved six infantry divisions, five cavalry divisions (in reserve), and a spearhead of three tank brigades supported by over 1,000 artillery guns and 14 air squadrons.[2]

The location of the attack, the area between the towns of Cambrai and St. Quentin, had been carefully chosen by Fuller because it had seen little fighting. The open, rolling ground had not been churned up by artillery fire and attacking troops, and was relatively firm and solid. This would give the tanks their first chance to operate over unbroken ground.

There were two key terrain features which dominated the avenues of approach to Cambrai, the Flesquieres ridge and Bourlon Hill. The Flesquieres ridge was located roughly in the center of the planned advance, while Bourlon was in the north. The plan was to capture these two key terrain features with the tanks and infantry in order to allow the cavalry to pass between them and take Cambrai. The town itself was of only minor importance, being a center of textile production before the war. However, four main railways passed through it, providing a major supply conduit for the German front line armies. Capturing it would break the Ger-



man's supply line and put the British in position to exploit the breakthrough in several directions.

Between the British lines and Cambrai lay a German defensive belt that was five and a half miles deep. It consisted of three defensive lines — the Hindenburg Main Line, the Hindenburg Support Line, and the Beaurevoir-Masnieres-Marcoing line. These trench systems had been constructed to take maximum advantage of the rolling terrain, using the ridges and spurs to hide portions of the defensive lines. The trenches had been built much wider than usual — up to 16 feet — and each trench system was preceded by dense barbed wire obstacles at least 50 yards deep. Concrete dugouts with massed machine gun batteries covered the avenues of approach.[3]

Manning these defenses were the soldiers of the German Second Army. These troops were of generally good quality and included some who had recently arrived from the Russian Front. However, this area of the front was regarded by the Germans as a rest zone for battle-weary troops because of the strong defensive structure.[4]

To break through these formidable defensive lines, Fuller devised a special method of attack.[5] Because the trenches were too wide for the tanks to cross, each tank was outfitted with a fascine, a bundle of wood that could be dropped into the trenches to make a bridge. Fuller dictated that the tanks would be organized into sections of three machines that would work together. The lead tank was to advance through the enemy's wire, flattening it for the infantry, and then, upon reaching the first trench, turn left and fire into it to suppress the defenders. The following two tanks would then advance and one would drop its fascine into the trench and both would cross over. The one that had dropped its fascine would then turn left and work down the trench from the back side, while the other would advance to the next trench line, drop its fascine, turn left and suppress the defenders in that trench. The first tank would then cross over both trenches, and go on to the third trench line with its own fascine to use as a bridge there. The tanks were to be closely followed by infantry organized into three sections as well; one to mark the path cleared by the tanks, one to clear the trenches, and one to garrison the trenches.

With this plan approved, a date was set and the forces were moved into position. Because surprise was an essential element of Fuller's plan, the tanks were moved in secrecy, mostly at night, to concealed positions near their start points. Also, in sharp contrast with previous attacks, there would be no preparatory artillery bombardment.

The attack began as planned at 6:20 a.m. on 20 November. A thousand artillery guns opened fire, raining high explosives and shrapnel on the German positions and shrouding the battlefield with smoke.[6] Simultaneously, the tanks moved out. The historic battle was underway.

The tanks' initial advance was quite successful. According to Trevor Wilson, "In the opening stages the progress of the attack proved irresistible."[7] He goes on to describe the advance:

"Followed by their columns of infantry, the tanks rolled ponderously onward through what the enemy had assumed was impregnable barbed wire. Then they reached trenches supposedly too deep and broad to allow their transit, unloaded their fascines, "dipped their noses in, and came up and over." While their enfilading fire harried the trench dwellers, the British infantry moved in to complete the conquest."[8]

One of the tank commanders, Captain D.G. Browne, gave the following account of the opening stages:

"The immediate onset of the tanks was overwhelming. The German outposts, dazed or annihilated by the sudden deluge of shells, were overrun in an instant. The triple belts of wire were crossed as if they had been beds of nettles, and 350 pathways were sheared through them for the infantry. The defenders of the front trench, scrambling out of the dug-outs and shelters to meet the crash and flame of the barrage, saw the leading tanks almost upon them, their appearance made the more grotesque and terrifying by the huge black bundles they carried on their cabs. As these tanks swung left-handed and fired down into the trench, others, also surmounted by these appalling objects, appeared in multitudes behind them out of the mist. It is small wonder that the front Hindenburg Line, that fabulous excavation which was to be the bulwark of Germany, gave little trouble. The great fascines were loosed and rolled over the parapet to the trench floor; and down the whole line, tanks were dipping and rearing up and clawing their way across into the almost unravaged country beyond. The defenders of the line were running panic stricken, casting away arms and equipment."[9]

All along the front, the attack met with success. By 8 a.m., the tanks and infantry had overrun the Hindenburg Main Line, and by 11:30 a.m. they had taken the Hindenburg Support Line in most places.[10] The attack was proceeding extremely well in all aspects, with one notable exception: Flesquieres.

The ridge near the village of Flesquieres, with its commanding view of the countryside, was the most impor-

tant objective of the center of the attack. It dominated the approaches to Cambrai and hid part of the Hindenburg Support Line behind it. The responsibility for taking this objective was given to the 51st Highland Division, an experienced and well respected unit. Its commander, General Harper, however, did not have much faith in the tanks.[11]

Contrary to Fuller's instructions, he ordered his infantry to keep well behind the tanks.[12] Furthermore, because the initial advance went faster than expected, he ordered a one-hour delay before continuing on to the Hindenburg Support Line in order to remain on schedule.[13] This gave the Germans time to move their field batteries to more mobile positions on the reverse slope of the ridge. From that position, they were able to engage the tanks of the British elements advancing on both the north and south, knocking out 11 of them before they moved out of range.[14] This, however, was not the worst of it for the British.

When Harper ordered his forces to continue the advance, they were completely unaware of the German field batteries on the other side of the ridge. Keeping with his instructions, the infantry let the tanks advance well ahead of them. The tanks advanced up the slope, cutting their way through the wire obstacles, with the infantry some four hundred yards behind. As they crested the top of the ridge, they came face to face with the German batteries. Silhouetted against the skyline, the tanks made perfect targets for the German gunners. With no infantry support, the tanks were sitting ducks, and 16 were destroyed before the German guns were themselves put out of action. This single event delayed the entire advance and caused the loss of 27 tanks to four German field guns.[15]

Moreover, the German resistance was stiffening. After the initial shock of the attack, the Germans regrouped and rushed all available forces to meet the onslaught. The infantrymen facing the tanks soon learned methods to disable them. By shooting through the lookout slits, they could injure or kill the crewmen, and by bundling grenades together and throwing them under the tracks, they could render a tank immobile.[16] These tactics, born of desperation, proved to be effective in slowing the British advance.

Still, the tank attack had, in the first day, achieved great success. The British Army had advanced nearly five miles, something months of infantry fighting had failed to accomplish. During the night, the Germans abandoned Flesquieres, and when the second day of the offensive dawned, the British were still advancing. However, the new day would not prove so fruitful for them.

To begin with, they had 179 fewer tanks on the second day — the casualties of both enemy fire and mechanical breakdown.[17] Also, it had begun raining during the night and the continuous drizzle kept most of their air support grounded. Finally, they were hampered by their own success on the previous day. Many of the commanders in the rear had not expected such spectacular results and they were slow to respond with additional orders. Communications with the troops and tanks at the front proved more difficult than expected and there were significant delays in getting troops moving.

Once underway, the British found the German resistance to be getting stronger and stronger. Their advance progressed much more slowly, but by mid-afternoon, they had captured the town of Fontaine, only two miles from Cambrai. But this marked the high point of their advance. Strong German resistance slowly ground the advance to a halt all across the front, and the especially determined defense of Bourlon Hill and Bourlon Wood defeated every British attack. With Bourlon Hill still in German hands, the British were unable to reinforce the handful of troops at Fontaine or continue the advance to Cambrai. At the end of the day, Sir Douglas Haig, commander of the British Expeditionary Force, decided to halt the advance and concentrate on consolidating their gains and capturing Bourlon Hill.

On the 22nd, after a full day of fighting, the British did manage to capture Bourlon Hill and the village of Bourlon, but they could advance no further. The three days of fighting had worn out the tank crews and their machines. The men were all in need of rest and most of the tanks needed repairs. The infantry soldiers were tired as well, and there were no reserves to continue the attack. Haig called an end to the offensive.

Although they had not reached their objectives, the British commanders were pleased with the operation. The tanks had achieved successes that were unprecedented in the two years of trench warfare on the Western Front. Unfortunately, though, the British counted their successes too early, and were unprepared for the German counterattack which came on November 30th. Using high-speed infiltration tactics, with little artillery preparation, the Germans quickly penetrated the British lines and recaptured much of the ground they had lost. Within a few days, the German counterattack had basically nullified the gains made by the British, although the lines shifted somewhat, with the British gaining some ground in the north, the Germans gaining some in the south.

Despite this later reversal, the Battle of Cambrai has gone down in history as a great success for the tank as a weapon. It proved the effectiveness of massed tanks supported by infantry in penetrating enemy defenses. With its combination of mobility, protection, and firepower, the tank proved itself to be an effective and powerful weapon, and it soon became a mainstay of modern armies. While it was not immediately grasped by many military leaders at the time, Cambrai was a demonstration of the future of warfare.

Notes

[1]Bryan Cooper, *The Battle of Cambrai,* (New York: Stein & Day, 1968) 64-65.

[2]Ibid., 68.

[3]The foregoing description of the terrain and defenses was drawn primarily from Cooper, 68-70.

[4]Trevor Wilson, *The Myriad Faces of War,* (Cambridge: Polity Press, 1986) 488.

[5]Cooper, 78-79. *See also* Philip J. Haythornthwaite, *The World War I Source Book,* (London: Arms and Armour Press, 1992) 97.

[6]Wilson, 489.

[7]Ibid., 490.

[8]Ibid. (Quoting "Cambrai", Part 4, *Royal Tank Corps Journal,* July 1936: 69).

[9]Cooper, 100. *See also* Martin Gilbert, *The First World War: A Complete History,* (New York: Henry Holt and Company, 1994) 379. Neither Cooper nor Gilbert provide a pinpoint cite for the quote, but its original source is apparently *The Tank in Action* by Captain D.G. Browne (London: William Blackwood, 1920).

[10]Wilson, 490.

[11]Cooper, 113. General Harper's dim view of tanks, and subsequent mishandling of them is confirmed in John Keegan, *The First World War* (New York: Alfred A. Knopf, Inc., 1999) 370-371.

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[12]Ibid., 114.

[13]Ibid.

[14]Ibid., 116.

[15]Ibid., 117.

[16]Ibid., 120.

[17]Wilson, 490.

Bibliographical Note

Most of the information for this article came from Bryan Cooper's book *The Battle of Cambrai,* (New York: Stein & Day, 1968). Most general texts on World War I give the Battle of Cambrai only a few pages of coverage. I tried to confirm information drawn from Cooper, at least generally, with one or more other sources. Below is a list of additional sources I consulted which provide general information about the battle:

Martin Gilbert, *The First World War: A Complete History,* (New York: Henry Holt and Company, 1994) 378-383.

Philip J. Haythornthwaite, *The World War I Source Book,* (London: Arms and Armour Press, 1992) 97.

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Captain Kristafer Ailslieger enlisted in the Kansas Army National Guard in 1987 and served as a flight operations specialist. He was commissioned in 1990 through OCS. He has served in 1st Battalion, 635th Armor, KSARNG, as a tank platoon leader (on both M60A3 and M1-series tanks), scout platoon leader, HHC XO, battalion S3 (air), and tank company commander. A graduate of AOBC, AOAC (resident), the Joint Firepower Control Course, and CAS3, he holds both a BA and MA in political science from Wichita State University, and a JD from Washburn University School of Law. He is currently a member of the 418 Civil Affairs Battalion, USAR. In the civilian sector, he is employed as a research attorney for the Kansas Court of Appeals.